



Micro Commercial Components



Micro Commercial Components
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2SC945-Y 2SC945-GR

Features

- Capable of 0.4Watts of Power Dissipation.
- Collector-current 0.15A
- Collector-base Voltage 60V
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Units |
|--------|-----------|-----|-----|-------|
|--------|-----------|-----|-----|-------|

OFF CHARACTERISTICS

| | | | | |
|---------------|---|-----|-----|---------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage ($I_C=0.1mA$, $I_B=0$) | 50 | | Vdc |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage ($I_C=1000\mu A$, $I_E=0$) | 60 | | Vdc |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage ($I_E=100\mu A$, $I_C=0$) | 5.0 | | Vdc |
| I_{CBO} | Collector Cutoff Current ($V_{CB}=60V$, $I_E=0$) | | 0.1 | μA |
| I_{CER} | Collector Cutoff Current ($V_{CE}=55V$, $R=10M\Omega$) | | 0.1 | μA |
| I_{EBO} | Emitter Cutoff Current ($V_{EB}=5.0V$, $I_C=0$) | | 0.1 | μA |

ON CHARACTERISTICS

| | | | | |
|---------------|--|-----|-----|-----|
| $h_{FE(1)}$ | DC Current Gain ($I_C=1.0mA$, $V_{CE}=6.0V$) | 120 | 400 | |
| $h_{FE(2)}$ | DC Current Gain ($I_C=0.1mA$, $V_{CE}=6.0V$) | 40 | | |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=100mA$, $I_B=10mA$) | | 0.3 | Vdc |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage ($I_C=100mA$, $I_B=10mA$) | | 1.0 | Vdc |
| V_{BE} | Base-Emitter Voltage ($I_E=310mA$) | | 1.4 | Vdc |

SMALL-SIGNAL CHARACTERISTICS

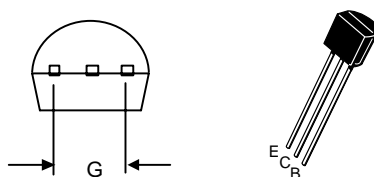
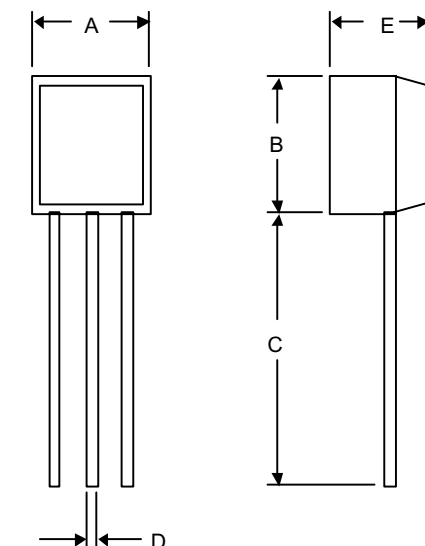
| | | | | |
|-------|--|-----|--|-----|
| f_T | Transistor Frequency ($I_C=10mA$, $V_{CE}=6.0V$, $f=30MHz$) | 150 | | MHz |
|-------|--|-----|--|-----|

CLASSIFICATION OF H_{ES}(1)

| | | |
|-------|---------|---------|
| Rank | Y | GR |
| Range | 120-240 | 200-400 |

NPN Silicon Plastic-Encapsulate Transistor

TO-92



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | .170 | .190 | 4.33 | 4.83 | |
| B | .170 | .190 | 4.30 | 4.83 | |
| C | .550 | .590 | 13.97 | 14.97 | |
| D | .010 | .020 | 0.36 | 0.56 | |
| E | .130 | .160 | 3.30 | 3.96 | |
| G | .096 | .104 | 2.44 | 2.64 | |

www.mccsemi.com

Ordering Information :

| Device | Packing |
|----------------|-----------------------------|
| Part Number-AP | Ammo Packing: 20Kpcs/Carton |
| Part Number-BP | Bulk: 100Kpcs/Carton |

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